



COMDTNOTE 16478

MAR 21 1997

COMMANDANT NOTICE 16478

CANCELLED: MAR 20 1998

Subj: CH-3 TO COMDTINST M16478.1B, HAZARDOUS WASTE MANAGEMENT  
MANUAL

1. PURPOSE. This Notice publishes revisions to Commandant Instruction M16478.1B.
2. ACTION. Area and district commanders, commanders of maintenance and logistics commands, commanding officers of Headquarters units, assistant commandants for directorates, Chief Counsel, and special staff offices at Headquarters shall ensure compliance with the provisions of this Notice.
3. PROCEDURES. Remove and insert the following pages:

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Page 1-11 thru 1-12  
Page 1-13  
Page 2-3 thru 2-6  
Page 4-9 thru 4-10  
Page 4-19 thru 4-20  
Page 4-25 thru 4-26  
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Page 8-1 thru 8-4  
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Insert

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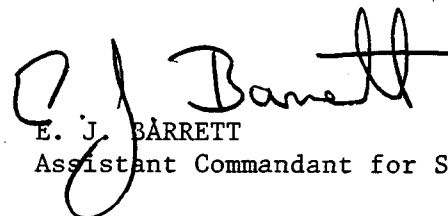
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4. SUMMARY OF CHANGES. New material is indicated with bold print. Revisions are summarized as follows:
- a. The Table of Contents shows changes to the manual's organization.
  - b. Chapter 1 adds definitions for universal waste and a transfer facility.
  - c. Chapter 2 identifies requirements for exporting hazardous waste and prescribes methods to prepare for audits and regulatory inspections.
  - d. Chapter 4 updates liability issues and identifies new recycling, satellite storage, and universal waste requirements.
  - e. Chapter 7 identifies new used oil requirements, and prescribes new procedures for disposal of Polychlorinated Biphenyls (PCBs).
  - f. Chapter 8 identifies new container air emissions requirements, and prescribes new procedures for hazardous waste accumulation areas.
  - g. Chapter 9 updates contingency plan requirements.
  - h. Chapter 10 updates training requirements.
  - i. Chapter 11 identifies new requirements for shipboard hazardous waste and used oil.
  - j. Enclosure (1) revises the Environmental Management Program Contacts.
  - k. Enclosure (2) revises U.S. EPA Regional Office Contacts.
  - l. Enclosure (3) revises State Hazardous Waste Management Agency Contacts.

  
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Assistant Commandant for Systems

Encl: (1) CH-3 to COMDTINST M16478.1B

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- ENCLOSURES:
- (1) Field and Headquarters Environmental Management Program Contacts
  - (2) Environmental Protection Agency (EPA) Regional Offices
  - (3) State Hazardous Waste Offices
  - (4) List of Agencies Designated to Receive Notifications
  - (5) EPA Form #8700-12, Notification of Regulated Waste Activity
  - (6) Intentionally Left Blank
  - (7) Uniform Hazardous Waste Manifest (EPA Form 8700-22 and 22A) and Instructions
  - (8) Hazardous Waste Report (EPA Form 8700-13A) and Instructions
  - (9) Sample Preparedness and Prevention Plan Information
  - (10) Sample Contingency Plan Requirements
  - (11) RCRA Emergency/Contingency Plan



- 1.H.29. Operator- means the person responsible for the overall operation of a facility. For Coast Guard applications, the operator is the unit Commanding Officer. Owner is the U.S. Coast Guard.
30. Person- means an individual, trust, firm, joint stock company, Federal agency, corporation (including a government corporation), partnership, association, state, municipality, commission, political subdivision or a state, or any interstate body.
31. Petroleum- means any crude oil or fraction thereof that is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 lbs. per square inch absolute).
32. pH- is a value taken to represent the acidity or alkalinity of an aqueous solution.
33. Reactivity- a characteristic defined by the EPA to include wastes which are normally unstable, react violently with water, and are capable of detonation at standard temperature.
34. Satellite Areas- are defined as those places where wastes are generated and where those wastes initially accumulate prior to removal to a central area. For example, a shop located within a Support Center may accumulate as much as 55 gallons of hazardous waste without concern for the normal time limitations. Once full, however, the wastes must be moved to the central accumulation area within 72 hours and become subject to the applicable provisions and time constraints. See Section M of Chapter 4 for further detail.
35. Small Quantity Generator- is a facility producing more than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month.
36. Spill- means the accidental spilling, leaking, pumping, pouring, emitting, or dumping of hazardous wastes or materials which, when spilled, become hazardous wastes into or on any land or water.
37. TCLP- means Toxicity Characteristic Leaching Procedure, a specific testing protocol established by EPA to determine the leaching potential for several specific waste products.
38. Toxicity- a characteristic defined by the EPA to include all wastes which fail the TCLP.

- 1.H.39. Transfer Facility- means any transportation related facility including loading docks, storage areas, and other similiar areas where shipments of hazardous waste are held during the normal course of transportation for ten days or less.
40. Transportation- means the movement of hazardous waste by air, rail, highway, or water.
41. Transporter- means a person engaged in the offsite transportation of hazardous waste by air, rail, highway, or water.
42. Underground Storage Tank- means any one or combination of tanks including connected underground pipes, which is used to contain regulated substances (including petroleum) and which only 10% or more of the tank and piping need actually be located beneath the surface of the ground.
43. Universal Wastes- means wastes which are subject to the streamlined management requirements of 40 CFR 273. At the present time only waste batteries, pesticides and mercury thermostats are considered universal wastes. The universal waste requirements are only allowed in states which do not have an authorized RCRA program (HI, AK, IA, and WY) or in RCRA authorized states which have adopted similiar regulations.

I. Assistance and Advice on Hazardous Waste related questions.

1. Additional information. Additional information regarding compliance with this Instruction is available from MLC and CEU hazardous waste contacts (Enclosure 1) and Commandant (G-SEC) at 202-267-2345.
2. Federal Regulations. Interpretation of excerpts from the Code of Federal Regulations which appear unclear, as well as any questions concerning hazardous waste may also be directed to the EPA via its RCRA Hotline. The Hotline number is 1-800-424-9346 or, for the Washington, D.C. area, 703-412-9810. Additional information is available from the EPA regional offices listed in Enclosure (2).
3. State Regulations. Answers to questions concerning state regulations can be obtained from the agencies listed in Enclosure (3), State Hazardous Waste Agencies.

**FIGURE 1-1**  
**LISTING OF COMMON HAZARDOUS WASTE ACRONYMS**

<b>CESQG</b>	<b>Conditionally Exempt Small Quantity Generator</b>
<b>CERCLA</b>	<b>Comprehensive Environmental Response, Compensation, and Liability Act</b>
<b>CEU</b>	<b>Civil Engineering Unit</b>
<b>CFR</b>	<b>Code of Federal Regulations</b>
<b>DOD</b>	<b>Department of Defense</b>
<b>DOT</b>	<b>Department of Transportation</b>
<b>DRMO</b>	<b>Defense Reutilization and Marketing Office</b>
<b>DRMS</b>	<b>Defense Reutilization and Marketing Service</b>
<b>DRMR</b>	<b>Defense Reutilization and Marketing Region</b>
<b>EP</b>	<b>Extraction Procedure</b>
<b>EPA</b>	<b>Environmental Protection Agency</b>
<b>HMIS</b>	<b>Hazardous Materials Information System</b>
<b>HSWA</b>	<b>Hazardous and Solid Waste Amendments of 1984</b>
<b>HW</b>	<b>Hazardous Waste</b>
<b>kg</b>	<b>Kilograms</b>
<b>LQG</b>	<b>Large Quantity Generator</b>
<b>LUST</b>	<b>Leaking Underground Storage Tank</b>
<b>MLC</b>	<b>Maintenance and Logistic Command</b>
<b>MSDS</b>	<b>Material Safety Data Sheet</b>
<b>NFPA</b>	<b>National Fire Protection Association</b>
<b>NRC</b>	<b>National Response Center</b>
<b>ORM</b>	<b>Other Regulated Material (DOT classification)</b>
<b>ppb</b>	<b>Parts per Billion</b>
<b>ppm</b>	<b>Parts per Million</b>
<b>ppt</b>	<b>Parts per Trillion</b>
<b>RCRA</b>	<b>Resource Conservation Recovery Act</b>
<b>RQ</b>	<b>Reportable Quantity</b>
<b>SARA</b>	<b>Superfund Amendments and Reauthorization Act</b>
<b>SPCCP</b>	<b>Spill Prevention, Control, and Countermeasure Plan</b>
<b>SQG</b>	<b>Small Quantity Generator</b>
<b>TCLP</b>	<b>Toxicity Characteristic Leaching Procedure</b>
<b>TSCA</b>	<b>Toxic Substances Control Act</b>
<b>TSDF</b>	<b>Treatment, Storage, and Disposal Facility</b>
<b>UST</b>	<b>Underground Storage Tank</b>



## 2.C. Funding.

1. Routine, Recurring Activities. Transportation and disposal of hazardous materials and hazardous wastes that are generated in the course of performing the unit's normal missions are routine, recurring, easily estimable costs and are payable within the unit commander's yearly operating budget. Such costs will be included in the unit's AFC 30 operating budget (or other appropriate operations and maintenance budget for units that do not have AFC 30 accounts) request, which is submitted to the program manager.
2. Emergency Funding. Funding for emergency disposal of hazardous materials (e.g., spill cleanup) may be requested from the unit's servicing Civil Engineering Unit, or from Commandant (G-SEC) for Headquarters Units.

## D. Hazardous Waste Disposal in Foreign Countries.

1. Applicable Standards. Coast Guard units disposing of hazardous waste in foreign countries cannot comply with the procedural requirements of RCRA since the use of manifests, generator identification numbers, etc. are meaningless outside the United States, unless using DRMO Services. Nonetheless, Coast Guard units must, at a minimum, comply with the environmental standards of general applicability in the host country or jurisdiction in accordance with Executive Order 12088, Federal Compliance with Pollution Control Standards.
2. Procedural Requirements. Continental U.S. Coast Guard units should avoid disposing of hazardous waste in foreign countries as a general practice. Exports of hazardous waste are prohibited unless:
  - a. EPA is notified of the intent to export (60) days before shipment off-site;
  - b. The receiving country consents to accept the hazardous waste;
  - c. A copy of the EPA Acknowledgment of Consent to the shipment accompanies the shipment; and
  - d. The shipment conforms to the terms of the receiving country's written consent as reflected in the EPA Acknowledgment of Consent (40 CFR 262.52).

## 2.E. Facility Inspections and Audits.

1. State and Federal inspections. States with EPA authorized hazardous waste programs and/or representatives of the Environmental Protection Agency may inspect Coast Guard facilities at any reasonable time to determine if we are in compliance with RCRA. The intensity of these inspections varies by region as well as the discretion of the individual inspector.
2. Coast Guard internal audits. As a result of Departmental guidance and as a sound practice, the Coast Guard has developed an internal environmental compliance auditing program. This program, provides an opportunity to analyze our compliance status under "friendly" audit conditions as a preparation for inspections by state and federal regulatory agencies as described above. Refer to COMDTINST 16478.5, Environmental Compliance Evaluation (ECE) Program for more specific guidance.
3. Preparation for audits and inspections. A good method to prepare for a visit from an auditor or inspector is to conduct your own self inspection. The following questions are provided as a basic check list to evaluate compliance at your unit.
  - a. Do you have documentation of the AMOUNT and KINDS of hazardous wastes you generate and on how you made the determination that they are hazardous? Do you know your generator status (LQG, SQG, CESQG)?
  - b. Do you have an EPA identification number?
  - c. How are your hazardous wastes removed from the unit and where are they taken? Do you use a licensed transporter ? What is his EPA ID number? Where does the waste ultimately go? What is the EPA ID number of the TSDF?
  - d. Do you have copies of Manifests used to ship your hazardous wastes off-site? Are they filled out correctly? Are all the required signatures included?
  - e. Have you filed any exception reports? If so, do you have copies and have the proper steps been taken to resolve the discrepancy?

- 2.E.3. f. Are your containers inspected for leaks and corrosion every week? Do you have copies of weekly container inspection logs on file? Are your containers marked with the words "HAZARDOUS WASTE," contents if known, and the accumulation start date? Does your temporary storage area have secondary containment?
- g. Have a contingency plan (LQG's only), emergency response plan and waste minimization plan been prepared? Are the names and telephone numbers of the responsible parties up to date? Do you have copies of arrangements made with local emergency response agencies?
- h. Have you designated an emergency coordinator to ensure that emergency procedures are carried out in the event an emergency arises?
- i. Are the emergency telephone numbers and locations of emergency equipment posted near the telephone?
- j. Are your personnel properly trained in accordance with 40 CFR 265.16, 40 CFR 262.34(d)(5), 49 CFR 172.704 and 29 CFR 1910.120(p)(8), if required? Do you have a written record documenting that the required training has been carried out?
- k. Are containers closed except when you fill them? Are containers of incompatible waste separated? Are containers in good condition?
- l. Are internal communications equipment, fire extinguishers and spill control equipment provided? Has your safety equipment been tested?
- m. Have you removed your hazardous waste within the specified time periods (90 days for LQG's and 180 days for SQG's).

## 2.F. Penalties and General Liability.

1. Federal, State, and Local Jurisdiction. Under the Federal Facility Compliance Act (FFCA), 42 USC Sec. 6961, the EPA, state and local jurisdictions all have authority to conduct inspections and enforce their hazardous waste management and disposal laws. The FFCA also requires Federal facilities to comply with these laws in jurisdictions with regulations that are more stringent than those promulgated by the EPA.
2. Fines and Penalties. The FFCA has empowered Federal, state and local hazardous waste management agencies to fine Federal facilities for noncompliance with their laws and regulations. Injunctive and administrative sanctions are also available as enforcement options. Many Federal agencies have been fined substantial sums for noncompliance with hazardous waste management laws since the passage of the FFCA.
3. Penalties Against Individuals. In some cases, Federal civilian employees and uniformed personnel have been prosecuted for criminal violations of hazardous waste management laws. These cases involved knowing violations of the law which resulted in damage to the environment or knowing endangerment to persons. While such cases are rare, it is important to note that heavy fines and jail terms can be the result of flagrant violations of hazardous waste laws.
4. Actions Required Upon Receipt of a Notice of Violation (NOV). When a unit receives a NOV, the chain of command must notify their servicing CEU and legal office. The Coast Guard must act quickly to appeal such findings, if appropriate. The unit must also act quickly to remedy any violations that are within its power to correct. When responding to an NOV, it is helpful to be able to note which violations have already been corrected. Prompt attention to these details presents the Coast Guard in the best light to regulators and reduces the likelihood of serious civil or criminal sanctions.

- 4.D.3. The CEU contact will have a listing of available laboratories by state and can provide this information on request. Any contracts or procurement requests should specifically require conformance with EPA Publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (December 1987).
4. Sampling methods. The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Sampling methods as listed below for various material types may be used and will be acceptable to the EPA when properly executed.
- a. Extremely viscous liquid - ASTM Standard D-140-70;
  - b. Crushed or powdered material - ASTM Standard D-346-75;
  - c. Soil or rock-like material - ASTM Standard D-420-69;
  - d. Soil-like material - ASTM Standard D-1452-65;
  - e. Fly ash-like material - ASTM Standard D-2234-76;

E. Used, Recycled, Reused or Reclaimed Commodities.

1. Recycled Wastes. Hazardous wastes that are recycled are subject to the same requirements as non-recycled waste except for materials identified in 40 CFR 261.6(a)(2)(a)(3), and (a)(4). The exceptions listed under 40 CFR 261.6 are quite limited. However, some exceptions applicable to many Coast Guard units are as follows:
- a. Recyclable materials from which precious metals are reclaimed (e.g., silver recovery);
  - b. Spent lead-acid batteries that are being reclaimed;
  - c. Used batteries other than lead-acid batteries returned to a battery manufacturer for regeneration (the exemption is for battery rebuilding not disposal);
  - d. Scrap metal; and
  - e. Used oil that is recycled and exhibits one or more of the characteristics of hazardous waste (not valid in those states that regulate used oil as a hazardous waste, see Chapter 7, Section K).

4.E.2. Recycling Advantages. Recycling used oil, precious metals, solvents, or lead-acid batteries offers significant advantages to the unit. Some of these advantages include:

- a. Local recyclers generally offer money for scrap metal, lead-acid batteries and silver. Units that have been authorized and designated to operate a CG Qualified Recycling Program (QRP) in accordance with COMDTINST 16477.5, Coast Guard Qualified Recycling Program (QRP) Policy may retain the proceeds from the sale of materials. The proceeds may to be used for QRP operating cost, environmental and pollution prevention projects or Morale Welfare and Recreation.
  - b. General conservation of resources.
  - c. Small quantity generators which recycle solvents under a solvent reclamation contract do not need to manifest exchange of the expended solvent provided the type and frequency of shipments are specified in the reclamation agreement, the transport vehicle is owned and operated by the contractor, and you maintain a copy of the reclamation agreement in your files for three years after termination of the agreement (40 CFR 262.20(e)).
  - d. Lead-acid batteries and used oil which are recycled as well as used batteries other than lead-acid batteries which are returned to a battery manufacturer for rebuilding do not need to be manifested or included in the calculation of hazardous waste generated per month.
3. Liability Reduction. As a result of recycling used oil, solvents, and/or batteries, paperwork requirements are reduced and disposal costs are avoided. Furthermore, disposal of batteries or used oil as waste, leaves the **United States** vulnerable to possible liabilities for the cleanup of disposal facilities in the event they should become subject to a Superfund or other cleanup in the future. Significant liability is possible even when only small amounts are involved. For example, when a unit disposes of only a small load of batteries, the **United States**, under certain circumstances, may end up liable for the cleanup of the entire disposal facility. Recycling the same batteries presents less opportunity for future liability. For this reason alone, Coast Guard units should make every effort to recycle.

4.M.1. 72 hours) and is subject to shipment within the specified period (90, 180, or 270 days as appropriate) commencing on the date it was moved from the satellite area, and all other requirements outlined under this Instruction. State regulations may differ on specific provisions for satellite areas.

2. Conditions for Use. Generators of hazardous waste may accumulate up to 55 gallons of hazardous waste, or one quart of acutely hazardous waste listed in 40 CFR 261.33(e) in containers at or near any point of generation where wastes initially accumulate, without regard to the 90 day storage time limit provided that:
  - (a) The containers are in good condition;
  - (b) The wastes are compatible with their containers;
  - (c) The containers are marked with the words "Hazardous Waste" or contents identity if known; and
  - (d) The containers are under the control of the operator of the process generating the waste.
3. Limitations. The satellite provision does not allow small quantity generators to accumulate more than 6000 kilograms without becoming subject to the additional requirements mandatory for large quantity generators. Likewise, this provision does not allow conditionally exempt small quantity generators to accumulate more than 1000 kilograms.
4. Locations. Note that a satellite area must be located within the physical boundaries of a given facility. Understanding this fact, a shop within a base or other unit may be considered a satellite. Individual units which are geographically separated, such as stations comprising a group, may not be considered satellites of the group command.

N. Recordkeeping and Reporting.

1. Regulatory Requirements. Subpart D of Part 262 provides detail regarding requirements outlined in paragraphs 2 through 6. If any doubt exists regarding a particular requirement, check with your CEU hazardous waste contact (Enclosure (1)).

4.N.2. Generators. Generators, other than conditionally exempt small quantity generators must keep a copy of each of the following for a period of three years (40 CFR 262.40):

- a. A copy of all manifest documents.
- b. Any test results, waste analysis or other determinations made in accordance with Section B of this chapter and 40 CFR 262.11.
- c. A copy of any reclamation/recycling agreement (such as required by Safety-Kleen) for a period of at least three years from expiration of the agreement.
- d. A copy of any exception report submitted.
- e. Copy of any request for a storage extension.
- f. Copies of biennial reports. Note that many states require these reports from all regulated facilities and in many cases, annual reporting is required. A large quantity generator who ships hazardous waste off-site must prepare and submit a biennial report, on EPA Form 8700-13A/B, to the State or Regional Office by March 1 of each even numbered year (40 CFR 262.41)(State requirement may differ). As a result of the waste minimization clause of the 1984 RCRA Amendments, biennial reports must also indicate efforts to reduce waste volume and the reduction actually achieved.

**Note:** Due to the significant liability connected with disposal of hazardous wastes, all hazardous waste management records and **contracts** shall be **permanently** retained at the "generating unit".

3. Conditionally Exempt Small Quantity Generators. Conditionally Exempt Small Quantity Generators (less than 100 kg/mo) are not subject to the requirements of this section except for the retention of test results as specified under paragraph 2.b. of this Section.
4. Biennial Report Forms. Forms and instructions for completion are provided as Enclosure (8). Current forms must be obtained from the EPA regional offices listed in Enclosure (2). Note that most states require their own form.

4.P.4.d. Recycling. The following Coast Guard waste items must be recycled whenever possible:

- (1) lead-acid batteries
- (2) nicad batteries
- (3) mercury cell strobe light batteries
- (4) solvents
- (5) waste oils

In addition to minimizing waste quantities, recycling of the above items (or any other items capable of recycling) can save a unit significant disposal costs and paperwork requirements. Additional benefits are pointed out in paragraph 4.P.3.

e. Segregation. The easiest way to achieve waste minimization is to segregate hazardous from non-hazardous waste. Generally speaking, adding the two together creates a mixture which is regulated as hazardous waste. See Chapter 4, Section K for recommended segregation practices.

#### Q. Universal Wastes.

1. Definition. Universal wastes are wastes which are subject to the streamlined management requirements of 40 CFR Part 273. At the present time only waste batteries, pesticides and mercury thermostats are considered universal wastes. The universal waste requirements are only allowed in states which do not have an authorized RCRA program (HI, AK, IA, and WY) or in RCRA authorized states which have adopted similar regulations.
2. Requirements. 40 CFR Part 273 provides a more detailed explanation of the universal waste management standards. All universal waste is excluded from monthly quantity determinations; a manifest is not required for shipment to a destination facility; universal waste must be marked with the initial accumulation date and the applicable words "universal waste-battery(ies), or pesticide(s) or mercury thermostat(s)"; and universal waste may be accumulated for no longer than one year from the date it is generated. Contact your servicing CEU for further assistance.

FIGURE 4-1a

# **SAMPLE "NOTIFICATION OF HAZARDOUS WASTE ACTIVITY" FORM\***

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved OMB No 2050-0028 Expires 9-30-88  
GSA No 0246-EPA-07

United States Environmental Protection Agency Washington, DC 20460		Please refer to the Instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).	
<div style="display: flex; align-items: center;"> <div style="font-size: 2em; margin-right: 10px;">EPA</div> <div>Notification of Hazardous Waste Activity</div> </div>			
For Official Use Only			
Comments			
C			
C			
Installation's EPA ID Number		Approved	Date Received (yr. mo. day)
C	T/A C		
F	1		
I. Name of Installation			
U.S. COAST GUARD BASE SCRANTON			
II. Installation Mailing Address			
Street or P.O. Box			
C	35 MOOSIC STREET		
C	City or Town		State ZIP Code
C	SCRANTON		PA 29044
III. Location of Installation			
Street or Route Number			
C	35 MOOSIC STREET		
C	City or Town		State ZIP Code
C	SCRANTON		PA 29044
IV. Installation Contact			
Name and Title (last, first, and job title)			Phone Number (area code and number)
C	SILBERMAN JAY LT		707 546 2862
V. Ownership			
A. Name of Installation's Legal Owner			B. Type of Ownership (enter code)
C	U.S. COAST GUARD		FF
VI. Type of Regulated Waste Activity (Mark "X" in the appropriate boxes. Refer to instructions.)			
A. Hazardous Waste Activity		B. Used Oil Fuel Activities	
<input checked="" type="checkbox"/> 1a. Generator <input type="checkbox"/> 2. Transporter <input type="checkbox"/> 3. Treater/Storer/Disposer <input type="checkbox"/> 4. Underground Injection <input type="checkbox"/> 5. Market or Burn Hazardous Waste Fuel (enter "X" and mark appropriate boxes below) <input type="checkbox"/> a. Generator Marketing to Burner <input type="checkbox"/> b. Other Marketer <input type="checkbox"/> c. Burner		<input checked="" type="checkbox"/> 1b. Less than 1,000 kg/mo. <input type="checkbox"/> 6. Off-Specification Used Oil Fuel (enter "X" and mark appropriate boxes below) <input type="checkbox"/> a. Generator Marketing to Burner <input type="checkbox"/> b. Other Marketer <input type="checkbox"/> c. Burner <input type="checkbox"/> 7. Specification Used Oil Fuel Marketer (or On site Burner) Who First Claims the Oil Meets the Specification	
VII. Waste Fuel Burning: Type of Combustion Device (enter "X" in all appropriate boxes to indicate type of combustion device(s) in which hazardous waste fuel or off-specification used oil fuel is burned. See instructions for definitions of combustion devices.)			
<input type="checkbox"/> A. Utility Boiler <input type="checkbox"/> B. Industrial Boiler <input type="checkbox"/> C. Industrial Furnace			
VIII. Mode of Transportation (transporters only — enter "X" in the appropriate box(es))			
<input type="checkbox"/> A. Air <input type="checkbox"/> B. Rail <input type="checkbox"/> C. Highway <input type="checkbox"/> D. Water <input type="checkbox"/> E. Other (specify)			
IX. First or Subsequent Notification			
Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA ID Number in the space provided below.			
<input checked="" type="checkbox"/> A. First Notification <input type="checkbox"/> B. Subsequent Notification (complete item C)		C. Installation's EPA ID Number	

FIGURE 4-5

SUMMARY OF EPA GENERATOR REQUIREMENTS

<u>REQUIREMENT</u>	<u>100 kg or less per mo.</u>	<u>&gt;100 kg and &lt;1000 kg per mo.</u>	<u>1000 kg or more per mo.</u>
♦ EPA Generator ID#	No	Yes	Yes
♦ Manifest wastes	No	Yes	Yes
♦ Time limit for disposal (days)	None	180	90
♦ Accumulate on-site without permit (kg)	1000	6000	Unlimited
♦ Satellite accumulation	N/A	Yes	Yes
♦ Recordkeeping and reporting	No	Yes	Yes
♦ Preparedness and Prevention	No	Yes	Yes
♦ Contingency Plan	No	No	Yes
♦ Personnel Training	No	Yes	Yes
♦ Disposal in regulated facility	Yes	Yes	Yes
♦ Disposal in Sanitary landfill	yes	No	No
♦ Waste minimization Program	No	No	Yes
♦ Exception Reports	No	Yes	Yes

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FIGURE 4-6

NO.	REACTIVITY GROUP NAME	
1	Acids, Mineral, Non-oxidizing	
2	Acids, Mineral, Oxidizing	
3	Acids, Organic	
4	Alcohols and Glycols	
5	Aldehydes	irt
6	Amides	roup will be
7	Amines, Aliphatic and Aromatic	codes and
8	Azo Compounds, Diazo Compounds and Hydrazines	s. For example,
9	Carbamates	19) with
10	Caustics	ross the page
11	Cyanides	ection of these
12	Dithiocarbamates	F. The Table
13	Esters	ble reactions of
14	Ethers	
15	Fluorides, inorganic	
16	Hydrocarbons, Aromatic	ity
17	Halogenated Organics	Consequences
18	Isocyanates	Heat generation
19	Ketones	Fire
20	Mercaptans and Other Organic Sulfides	Innocuous and non-flammable gas generation
21	Metals, Alkali and Alkaline Earth, Elemental	Toxic gas generation
22	Metals, Other Elemental & Alloys as Powders, Vapor	Flammable gas generation
23	Metals, Other Elemental & Alloys as Sheets, Rod	Explosion
24	Metals and Metal Compounds, Toxic	Violent polymerization
25	Nitrides	Solubilization of toxic substances
26	Nitriles	May be hazardous but unknown
27	Nitro Compounds, Organic	
28	Hydrocarbons, Aliphatic, Unsaturated	Heat generation, fire, and toxic gas generation
29	Hydrocarbons, Aliphatic, Saturated	
30	Peroxides and Hydroperoxides, Organic	
31	Phenols and Cresols	
32	Organophosphates, Phosphothioates, Phosphodith	
33	Sulfides, Inorganic	3
34	Epoxydes	P 34
101	Combustible and Flammable Materials, Miscellaneous	101
102	Explosives	H E H E 102
103	Polymerizable Compounds	H E 103
104	Oxidizing Agents, Strong	H F H F H E H F 104
105	Reducing Agents, Strong	H G F H E H P H F 105
106	Water and Mixtures Containing Water	H G F 106
107	Water Reactive Substances	VERY REACTIVE! 107

4-33

3	34	101	102	103	104	105	106	107
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FIGURE 4-7b

<b>TOXICITY CHARACTERISTIC LIST</b> EFFECTIVE 26 SEP 90 - LARGE QUANTITY GENERATORS 29 MAR 91 - SMALL QUANTITY GENERATORS					
CONTAMINANT	EPA HW No.	(mg/L)	CONTAMINANT	EPA HW No.	(mg/L)
<input type="checkbox"/> ARSENIC	D004	_____	<input type="checkbox"/> HEXACHLORO-1,3-BUTADIENE	D033	_____
<input type="checkbox"/> BARIUM	D006	_____	<input type="checkbox"/> HEXACHLOROETHANE	D034	_____
<input type="checkbox"/> BENZENE	D010	_____	<input type="checkbox"/> LEAD	D008	_____
<input type="checkbox"/> CADMIUM	D009	_____	<input type="checkbox"/> LINDANE	D013	_____
<input type="checkbox"/> CARBON TETRACHLORIDE	D019	_____	<input type="checkbox"/> MERCURY	D000	_____
<input type="checkbox"/> CHLORDANE	D020	_____	<input type="checkbox"/> METHOXYCHLOR	D014	_____
<input type="checkbox"/> CHLOROBENZENE	D021	_____	<input type="checkbox"/> METHYL ETHYL KETONE	D036	_____
<input type="checkbox"/> CHLOROFORM	D022	_____	<input type="checkbox"/> NITROFEN7FNF	D036	_____
<input type="checkbox"/> CHROMIUM	D007	_____	<input type="checkbox"/> PENTACHLOROPHENOL	D037	_____
<input type="checkbox"/> O-CRESOL	D023	_____	<input type="checkbox"/> PYRIDINE	D038	_____
<input type="checkbox"/> M-CRESOL	D024	_____	<input type="checkbox"/> SELENIUM	D010	_____
<input type="checkbox"/> P-CRESOL	D025	_____	<input type="checkbox"/> SILVER	D011	_____
<input type="checkbox"/> CRESOL	D026	_____	<input type="checkbox"/> TETRACHLOROETHYLENE	D039	_____
<input type="checkbox"/> 2,4-D	D016	_____	<input type="checkbox"/> TOXOPHENE	D018	_____
<input type="checkbox"/> 1,4-DICHLOROBENZENE	D027	_____	<input type="checkbox"/> TRICHLOROETHYLENE	D040	_____
<input type="checkbox"/> 1,2-DICHLOROETHANE	D028	_____	<input type="checkbox"/> 2,4,5-TRICHLOROPHENOL	D041	_____
<input type="checkbox"/> 1,1-DICHLOROETHYLENE	D029	_____	<input type="checkbox"/> 2,4,6-TRICHLOROPHENOL	D042	_____
<input type="checkbox"/> 2,4-DINITROTOLUENE	D030	_____	<input type="checkbox"/> 2,46-TP (SILVEX)	D017	_____
<input type="checkbox"/> ENDRIN	D012	_____	<input type="checkbox"/> VINYL CHLORIDE	D043	_____
<input type="checkbox"/> HEPTACHLOR (AND ITS HYDROXIDE)	D031	_____			
<input type="checkbox"/> HEXACHLOROBENZENE	D032	_____			

**PART III**  
**FOR DRMO USE ONLY**  
**DRMO VERIFICATION**

1. DATE VERIFIED \_\_\_\_\_

2. RESULTS ☐ ATTACHED

pH \_\_\_\_\_ FLASH POINT \_\_\_\_\_ SPECIFIC GRAVITY \_\_\_\_\_ HALIDES (TOX) \_\_\_\_\_

REACTIVITY: WATER REACTIVITY \_\_\_\_\_ CYANIDES \_\_\_\_\_ SULFIDES \_\_\_\_\_

TCLP \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## CHAPTER 7. MANAGEMENT/DISPOSAL PRACTICES FOR TYPICAL CG WASTE ITEMS

### A. General.

1. Sources of Hazardous Waste. Sources of hazardous wastes at Coast Guard facilities include a variety of materials and range from used batteries to spent solvents and paints. Figure 7-1 presents a listing of the most common waste items and the EPA waste numbers applicable to each. The following Sections of this Chapter provide a brief summary of the most common waste sources and the disposal/storage methods which would typically be recommended for each.
2. Management/Disposal Procedures. This chapter is designed to provide a concise reference regarding the management and disposal of common waste items. This chapter shall be used in conjunction with other information provided throughout the instruction and is not intended to serve as an independent reference. Units located in states which have adopted the universal waste management standards (40 CFR 273) are subject to less stringent management requirements for used batteries. CESQG's may not be subject to all provisions of this chapter. Consult with your CEU environmental specialist for further advice.
3. Packaging Guidelines. While considerable detail is specified below for the proper packaging of Coast Guard generated hazardous waste, a good rule of thumb is to use the packaging that the product was received in providing it has not been damaged or contaminated. You should be aware that the regulations in 49 CFR impose significant duties on shippers of hazardous materials and waste. Recommended containers are 55-gallon or smaller drums to allow for overpacking in an 85-gallon salvage drum in the event of a leak.

### B. Lead-Acid Batteries.

1. General.
  - a. Lead-acid batteries, used mainly in cars, boats, motorized vehicles, and solar powered aids to navigation are wet, rechargeable, and usually six-celled. Each cell consists of sponge lead (anode) and lead dioxide (cathode) plates totally immersed in sulfuric acid electrolyte.
  - b. The corrosive electrolyte contained within lead-acid batteries warrants the disposal of lead-acid

- 7.B.1.b. (Cont'd) batteries as hazardous wastes. The EPA Hazardous Waste Identification Numbers are D002 (corrosivity) and D008 (toxicity characteristic for lead). Lead-acid batteries which are reclaimed or exchanged (new-for-old) do not need to be disposed of as hazardous waste. Lead-acid batteries should only be disposed of as waste if their condition precludes recycling, or recycling is cost prohibitive.

2. DOT Specifications

- a. Transportation of lead-acid batteries for disposal requires the following information:
- o Proper Shipping Name: "Waste battery, wet, filled with acid"
  - o Hazard Class: 8
  - o Identification Number: UN2794
  - o Packing Group: III
  - o Label: CORROSIVE
  - o EPA Hazardous Waste Numbers: D002 and D008
- b. Further Transportation requirements are the same as those specified under Section E.2. of this chapter.

3. Temporary Storage.

- a. Lead-acid batteries and their containers should be stored in a well-ventilated, dry place. A general-purpose warehouse is an acceptable storage area. Wet-cell storage batteries awaiting disposal shall be stored either in nonleaking containers or double-wrapped in plastic bags, palletized and banded. When storing expended batteries which are to be disposed (batteries which will be recycled need not meet marking and inspection requirements), the date of initial accumulation shall be marked on each batch of batteries stored. Weekly inspection to detect leaking containers is required.
- b. Lead-acid and Zinc-Air ATON batteries shall not be stored together in the same piles or pallets due to incompatibility of their respective acid and base contents.
- c. Units located where freezing may occur should consider storage of discharged batteries inside to prevent freezing and cracking of the case.

7.J.3. Land Ban Notification. Note that manifests for either paragraphs 2 or 3 above must include the appropriate Land Ban notation as discussed in Chapter 4.

K. Used Oils and Fuels.

1. General.

- a. USCG used oils and used oil mixtures identified as consisting of small quantities of gasolines and diesel fuels, hydraulic oils, and other similar materials destined for recycling are subject to the used oil management standards (40 CFR 279). EPA presumes that used oil is to be recycled.
- b. In general, mixtures of used oil and hazardous waste must be managed as a hazardous waste and not used oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste and thus must be managed as hazardous waste unless the presumption is rebutted. Mixtures of used oil and hazardous waste that are listed in subpart D of 40 CFR 261 are subject to regulation as hazardous waste. Mixtures of used oil and characteristic hazardous waste are subject to regulation as hazardous waste if the resultant mixture exhibits any characteristics of hazardous waste identified in subpart C of 40 CFR 261. Used oil mixed with a waste which is hazardous solely because it exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits) may be managed under the used oil standards, provided that the resultant mixture does not exhibit the characteristic of ignitability (despite exhibiting any of the other characteristics).
- c. Several states regulate used oil either as a hazardous waste or under their solid waste regulations. In those states where used oil is regulated, unit hazardous waste managers must ensure that state and local requirements are met. Requirements may include the manifesting of any used oil as a hazardous waste. Questions concerning state requirements should be initiated through your servicing CEU see enclosure (1).
- d. Aviation fuel from testing for water contamination can be mixed with fuel oil and burned for energy recovery. (See Sec. E Chapter 4)

7.K.2. DOT Specifications.

- a. Manifest information for transportation of used oils and waste oil mixtures is as follows:
    - o Proper Shipping Name: "Waste flammable liquid, n.o.s."
    - o Hazard Class: 3
    - o Identification Number: UN1993
    - o Packing Group: III
    - o Label: FLAMMABLE LIQUID
    - o Additional Information:(insert technical names of at least two components that most contribute to the hazard of the mixture)
  - b. Selection of the appropriate DOT hazard class is dependent upon the material's flash point (not more than 141°F for flammable, and above 141°F, and below 200°F for combustible).
3. Temporary Storage. Used oil shall be stored in containers or aboveground tanks which are in good condition (no severe rusting, apparent structural defects or deterioration), and not leaking. Containers and aboveground tanks used to store used oil must be marked clearly with the words "Used Oil".
  4. Disposal. Coast Guard policy dictates that used oil will be recycled whenever possible. Used oil that is identified as a hazardous waste and cannot be recycled in accordance with 40 CFR 279 must be managed as a hazardous waste. Used oils that are not hazardous wastes and cannot be recycled must be disposed in accordance with 40 CFR 257 and 258 and applicable state laws. In either case, the chemical constituents of the materials must be disclosed prior to disposal. If the composition of the material to be disposed is unknown, extensive laboratory analysis is necessary to determine all chemical constituents.
  5. Use as a Dust Suppressant. No Coast Guard unit shall use used oil or any other hazardous waste as a dust suppressant.

L. Asbestos.

1. Disposal Requirements. The disposal of asbestos-containing material (ACM) is not regulated under RCRA, but rather, under the Clean Air Act (CAA). As is frequently the case, individual states may list asbestos as a hazardous waste. Detailed regulatory

7.L.1. (Cont'd) requirements for the disposal of asbestos are found under 40 CFR 61.150. Basic disposal guidelines are outlined below: (The following guidelines are provided to allow individuals to gain a quick and brief understanding of the basic requirements. 40 CFR 61.150 must be referenced to fully understand the applicable requirements)

- a. Asbestos-containing waste material should be formed into nonfriable (friable is defined as readily crumbled; brittle) pellets or other shapes.
- b. Demolition, renovation, and other actions resulting in the collection of asbestos must use methods which will prevent the discharge of visible emissions to the outside air such as wetting down or plastic cover.
- c. Waste material containing friable asbestos should be treated with water to form a slurry and then be sealed in leak-tight containers while wet. The containers shall be labeled as follows:

"Contains Asbestos, Avoid Opening or Breaking Container. Breathing Asbestos is hazardous to your Health."

- d. Asbestos material must be disposed in a landfill approved for asbestos material.

2. Policy Guidance. Requirements applicable to Coast Guard personnel involved in the handling of asbestos containing material may be found in COMDTINST M6260.16, Asbestos Exposure Control Manual.

M. Polychlorinated Biphenyls (PCB's).

1. The disposal of PCB's and equipment containing PCB's is regulated under the Toxic Substances Control Act (TSCA). Requirements are detailed under COMDTINST M16478.2, The Procurement, Handling, and Disposal of Polychlorinated Biphenyls.
2. Any piece of electrical equipment containing 50 ppm or greater of PCB's must be transported and disposed in accordance with 40 CFR 761 and COMDTINST M16478.2. Units considering transportation or disposal of PCBs shall request assistance from their servicing CEU. Under no circumstances shall a Coast Guard unit ship PCB's to another Coast Guard unit without coordinating, before the fact, with the receiving unit.

- 7.M.3. Requirements of the Resource Conservation Recovery Act (RCRA) do not normally apply to the management and disposal of PCB's. If the PCB's meet one of the other definitions as hazardous waste as a result of mixing with either a listed or characteristic waste, they are fully regulated by RCRA, are covered by the land ban, and must be specially handled. Note: some states do regulate PCB's as a hazardous waste and may therefore require management/disposal practices similar to those specified in this Manual. Contact your CEU environmental protection specialist (enclosure (1)) to ascertain state requirements.

## CHAPTER 8. STORAGE AND CONTAINER REQUIREMENTS

### A. Container Specifications.

1. Condition of Containers. If a container holding hazardous waste (HW) is damaged, defective or if it begins to leak, the owner or operator must transfer the hazardous waste into an approved container, or place the defective container into a metal or plastic removable head salvage drum which meets all the conditions specified in 49 CFR Part 173.3 (c).
2. Compatibility and Testing of Containers.
  - a. Containers must be made of or lined with materials which will not react with, and are otherwise compatible with the hazardous wastes to be stored. Steel drums are generally sufficient for most known Coast Guard wastes, except liquid corrosives.
  - b. Procurement of new drums is not required. Previously used drums may be reused for accumulation and shipment of HW by highway only (49 CFR 173.12(c)). These drums may not be offered for transportation less than 24 hours after finally closed for transportation (to check for leakage) and must be inspected for leakage immediately prior to being offered for transportation. It is not recommended that LQGs use reused containers. The new RCRA volatile organic compound (VOC) emissions rule requires that LQGs accumulate VOC hazardous waste in containers that meet the applicable DOT packaging specifications of 49 CFR 178, or in containers equipped with a cover and closure devices that form a continuous barrier over the container opening. VOC measurements and monitoring activities are not required for units which store VOC hazardous waste in containers with a capacity of 119 gallons or less. SQGs are excluded from the new VOC regulations. Contact the environmental protection specialist at your servicing CEU or ISC for further guidance concerning VOC issues.
  - c. Title 49 CFR, Part 178 prescribes the manufacturing and testing specifications for packaging and containers used for transportation of hazardous materials.

8.A.3. Handling and Closure. A container holding hazardous waste must always be closed during storage except when necessary to add or remove waste. The bung should be wrench tight (Note that the difference between hand and wrench tight is often a matter of the personal opinion of the inspector). In addition, a container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or otherwise cause it to leak.

4. Labeling of containers. Labeling requirements are specified in Section E of Chapter 5. Supplemental information (specific labeling requirements for common Coast Guard waste items) is also provided by waste type in Chapter 7.

B. Empty Containers.

1. Definition. Empty containers or container liners are not regulated as hazardous waste if all wastes have been removed and no more than 2.5 centimeters (one inch) of residue remains. If the containers are compressed gas cylinders or aerosol cans the pressure within the empty containers must approach atmospheric. For acutely hazardous wastes listed in 40 CFR 261.33(e), the container or liner must be triple rinsed with a solvent capable of removing the waste. You should note that the definition of "empty" under RCRA is not necessarily the same as that for transportation under 49 CFR. Contact your servicing CEU for further advice.

2. Marking. All empty drums and containers shall be clearly marked with the word "EMPTY". All other markings shall be removed or painted over. This is important since emergency response teams commonly encounter empty drums with old markings. Response personnel are unaware that such a container is empty, thereby causing lengthy and avoidable delays. Furthermore, in an old landfill it may be impossible to determine which drums may have been empty versus those drums whose contents have leaked into the surrounding landfill.

3. Triple Rinsing. Empty containers of acutely hazardous waste shall be triple rinsed with a solvent capable of removing the residue. The quantity of solvent used for each of the three rinses must equal ten percent of the container capacity. If the rinsate can't be re-used it must be managed as a hazardous waste.

### 8.C. Engineering Standards for Temporary Storage Areas.

1. Temporary Storage. Temporary storage (Accumulation) areas must be designed as follows:
    - a. Locate on a well-drained site to prevent accumulation of precipitation and locate as far as practical from any floor drain, storm sewer or body of water. Minimize the possibility of any unplanned release of hazardous waste by providing spill pans, "poly spill containment pallets", "poly dual-drum storage containers" or an impermeable bermed storage pad designed to contain 110% of the volume of the largest container or 10% of the total volume of all containers whichever is greater.
    - b. Containers need to be elevated so as to avoid standing water and allow easy inspection. The use of shipping pallets, preferably plastic will generally prove a practical means of satisfying this requirement.
  2. Security. Security fencing or drum locks may be necessary in some circumstances where the responsible command seeks to protect against tampering or trespassers to the accumulation area. Note however that in situations where the accumulation area needs to be frequently opened for purposes of adding small amounts of waste to a drum, such controlled access may encourage indiscriminate dumping. This situation should not be a problem at units which handle small amounts through satellite drums (or 5 gallon cans) and the accumulation area is used solely for the storage of filled containers.
  3. Roofing. Enclosed or roof covered enclosures are not required, but may be desirable at those locations subject to extreme weather conditions.
- D. Inspections. All units which generate greater than 100 kilograms of hazardous waste per month shall conduct weekly inspections of all areas where hazardous wastes are temporarily stored. CESQGs should check with their state regulatory agency to determine if any state inspection requirements are applicable. A written inspection log describing the condition of the stored materials and their containers will be maintained by the designated HW manager. Copies of the logs shall be kept for at least three years. A sample format for inspection logs is provided as Figure 8-2.

FIGURE 8-2

# WEEKLY CONTAINER INSPECTION LOG SHEET

## STATUS LEGEND

Satisfactory -----  
Unsatisfactory -----  
Not Applicable -----

LOCATION: -----  
DATE: ----- TIME: -----  
INSPECTOR'S NAME: ----- SIGNATURE: -----

CHECKLIST ITEM	POSSIBLE PROBLEM	STATUS	OBSERVATIONS	DATE AND NATURE OF REMAIRS/REMEDIAL ACTION
Security:	Fence unlocked/opened.			
Signs:	Missing/Incorrect/Not/Readable.			
Structural Equipment:	Foundation/Walls/Roof/Containment System.			
Container Storage:	Aisle Space.. Drums without pallets.. Incompatible Storage..			
Condition of Containers:	Open to atmosphere.. Deteriorating/damaged.. Missing lid/bolt/ring.. Container bulged..			
Compatibility of Container with Waste:	Improper container/No liner.			
Packaging/Marking:	No Marking.. Improper Packaging..			
Waste Accumulation:	Absence of recordkeeping.. Accumulation Date..			

## CHAPTER 9. CONTINGENCY PLANS AND EMERGENCY PROCEDURES

### A. General.

1. Regulations. Regulations located at 40 CFR 265, require that large quantity generators (1000kg/mo or more) maintain and operate their facilities in a manner that minimizes the potential for unplanned releases of hazardous waste. Requirements call for an emergency communication system, for fire and spill prevention/control equipment, and for arrangements with local police, fire and emergency response teams. Furthermore, it is required to formalize one's preparation through a written contingency plan designed to minimize hazards from fires, explosions, or any unplanned release of hazardous waste. Although separate management and contingency plans are allowed, we strongly recommend that there be one management plan for hazardous waste which is sufficient to meet both requirements.
2. Plan Implementation. The provisions of the contingency plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment. A simplified summary of these requirements is contained in figures 9-1 and 9-2. Full details regarding these requirements is spelled out under 40 CFR 265, Subparts C & D. A sample preparedness and prevention plan is provided as Enclosure (9) and a detailed outline of contingency plan requirements is provided as Enclosure (10).
3. Plan Format. A format for a unit contingency plan is provided as Enclosure (11). Units which generate 1000 kg per month or more shall use the format presented under Enclosure (11), filling in the various blocks using guidance from this Chapter and Enclosure (10). Completion of the contingency plan combined with preparedness and prevention information outlined in Enclosure (9) will satisfy EPA and many State and local requirements. Although emergency/preparedness plans and contingency plans are described as separate requirements under Federal regulations, it is reasonable to combine the required information into a single document. An elaborate and lengthy plan is not necessary. A brief plan using the format outlined under Enclosure (11) will be sufficient for most Coast Guard units. The size and complexity of a unit will dictate what length and detail is appropriate for the plan.

- 9.A.4. Training. All units which handle hazardous waste shall train personnel and otherwise prepare for possible emergencies as appropriate to the scale and danger of hazardous waste handled or released. Most important here is the awareness of personnel regarding possible injury to skin, eyes, etc. if a given waste is improperly handled or released. Knowledge of the medical steps immediately recommended for such a possibility is also a basic training need. (NOTE: See Chapter 10 of this manual for a complete description of training requirements.)

B. Hazardous Waste Discharges (Spills) and Clean-Up.

1. Immediate Action. In the event of a discharge of hazardous waste the generator or transporter must take appropriate action to "protect human health and the environment". This may require diking the spill area, notifying local authorities, and, if necessary (a spill has exceeded the reportable quantity for example), notifying the National Response Center (800-424-8802). In general, common sense should dictate that serious spills will require some form of notification. WHEN IN DOUBT, REPORT THE SPILL.
2. Notification. Notification is generally required when:
  - a. A spill reaches a water body or water system,
  - b. Human safety might be endangered
  - c. When environmental contamination is possible
  - d. When the amount released exceeds the reportable quantity for that substance as established by EPA
3. Small Spills. Small spills may in fact be significant. For example, spilling only a small amount of solvent on a highly porous soil (without cleanup) may allow the solvent to leach down to a shallow aquifer, which then may contaminate an entire drinking water supply.
4. Reporting Requirements. Federal, state, and local reporting requirements are complex, confusing, and sometimes overlap or conflict. As a result it is prudent that when in doubt, report the spill. If a spill has gone down drains or into sewers call the sewer authority and/or wastewater treatment plant in addition to the NRC. Furthermore, if a spill has entered a reservoir or other drinking water supply, call the water authority.

## CHAPTER 10. PERSONNEL TRAINING

### A. Required Training.

1. Regulations. The EPA training regulations applicable to LQG facility personnel are found in 40 CFR 265.16, and the regulations for SQG personnel are found in 40 CFR 262.34 (d) (5) (iii). DOT training regulations 49 CFR 172.704 are applicable to personnel who certify hazardous waste manifests. OSHA training regulations 29 CFR 1910.120(p) (8) (iii) are applicable to LQG and SQG facility personnel who are required to respond to emergencies within hazardous waste related areas. CESQG's should check with their state regulatory agency to determine if any state training requirements are applicable.
2. Requirements. All personnel with the exception of CESQG personnel who manage hazardous wastes are required to receive mandatory training to perform the tasks assigned, including responding to emergencies such as spills, fires, or explosions. Resident, computer-based, and on-the-job (OJT) training can all be used as delivery methods depending on the availability of mandatory training funds. The training program must be directed by a person trained in hazardous waste management procedures. Unit hazardous waste coordinators shall provide training to other unit personnel who perform hazardous waste tasks at the unit that meets federal and state requirements. Every effort shall be made to appoint unit hazardous waste coordinators from the large pool of Coast Guard personnel who have already received task related training.

- B. Frequency of Training. Initial EPA training must be completed by LQG personnel within six months after assignment followed by annual refresher training. SQG personnel must be familiar with waste handling and emergency procedures relevant to their responsibilities. EPA regulations do not specify the frequency or scope of SQG training. Annual refresher training is not required for SQG personnel. Initial DOT training must be completed by personnel assigned to certify manifests within 90 days after assignment followed by triennial refresher training. One time OSHA emergency response training must be completed by LQG and SQG emergency coordinators before they are called upon in a real emergency.

10.C. Recordkeeping. Initial and refresher training must be documented in a log or other suitable record which records the employee's name, job title and description, and the dates and subject of training. Training records must be maintained for all current personnel both military and civilian handling or managing hazardous waste. Training records on former employees or transferred personnel must be kept for at least three years from the date the person last worked at the facility. The training log shall be maintained by a supervisor responsible for the handling of hazardous materials/waste or the unit hazardous waste coordinator in the case of large units, and shall reflect annual training updates as well as initial training sessions. Copies of training records documenting completion of training shall be provided to all personnel departing the unit for their records.

D. Purpose of the Training Program. In addition to compliance with the regulatory requirements, the purpose of the training program is to teach facility personnel the following basic principles:

1. The Coast Guard Approach to Sound Management of Hazardous Wastes.
2. Performance of Required Tasks Safely Without Causing a Spill or Other HM/HW Incident.
3. Respond Effectively to Emergencies.
4. Avoid Unnecessary Testing, and Disposal Costs.

E. Contents of training program. Each training program should be tailored to the specific unit (or group of units). All training programs should include at least some discussion of each of the following topics:

1. RCRA Introduction and Overview.
2. Standards Applicable to Generators (LQG's, SQG's, and CESQG's).
3. Identifying Hazardous Waste.
4. DOT Classification of Hazardous Wastes.
5. Hazardous Waste Manifest Preparation.

## CHAPTER 11. SHIPBOARD HAZARDOUS WASTE

### A. General Information.

1. Policy. The Federal Facility Compliance Act exempts public vessels from the storage, manifest, inspection and recordkeeping requirements of hazardous waste regulations. Therefore, for purposes of Federal and State RCRA requirements ships are not generators. Written Host/Tenant agreements establishing the responsibilities of the tenant vessel with regard to proper management and handling of hazardous wastes shall be mandatory and renewed annually. See Figure 2-2 for a sample Host/Tenant Agreement. The HOST is responsible for preparation of the Host/Tenant Agreement. Visiting vessels shall be provided with a copy of the local HW Management Instruction. Except in an emergency involving the safety of the ship or its crew, no hazardous wastes will be discharged while underway.
2. Waste Generated Aboard Ship. Hazardous wastes generated aboard ship shall be properly managed in accordance with the applicable sections of this Instruction. The wastes will then be turned over for disposal to a supporting shore facility which has an EPA generator identification number. The turn over will be accompanied by a completed DD-1348 and Hazardous Waste Profile Sheet. The vessel shall be responsible for insuring that the DD-1348 is completed, the waste is properly identified, packaged, and marked. All manifests and records will be prepared and maintained by the host shore facility.
3. Packaging and Marking. It is very important that all hazardous wastes be properly packaged and marked. Failure to mark drums and other containers will cause considerable confusion, expense, and possible danger to shore facility personnel. Unidentified waste must be tested before disposal and typically costs hundreds of dollars for even small quantities. Costs for testing are generally the responsibility of the generating unit. Contact your servicing CEU for technical advice on proper testing. The importance of proper marking and handling cannot be overemphasized. LIABILITY FOR IMPROPER MANAGEMENT OF HAZARDOUS WASTE RESTS WITH THE UNIT (VESSEL) COMMANDING OFFICER.
4. Typical Wastes Generated Aboard Ship. Typical hazardous wastes from vessels and their operations include ATON batteries, spent OBA canisters, paints, and solvents, bilge slops, and waste fuels and oil.

- 11.A.5. Shipboard HW/HM Coordinator. Commanding officers and Officers in Charge of vessels shall appoint an individual responsible for the proper management and transfer of any hazardous wastes generated on board. This individual will (1) ensure the proper packaging, marking, and handling of any hazardous wastes, and (2) coordinate transfer of the waste to the appropriate shore command in a responsible manner. SPECIAL NOTE: If independently moored, the hazardous waste coordinator shall coordinate the disposal of wastes with the DRMO or waste disposal contractor. Information pertaining to hazardous waste contracts effective in your operating area may be obtained from the designated CEU or MLC hazardous waste contact listed under Encl. (1).
6. Dichromate Rust Inhibitor. Should any vessel still use or retain old supplies of dichromate corrosion inhibitor, the corrosion inhibitor is to be disposed of as a hazardous waste. Use of corrosion inhibitors is addressed under the Naval Engineering Manual, COMDTINST M9000.6B. Disposal data is as follows:
- o Proper Shipping Name: "Hazardous waste, liquid, n.o.s."
  - o Hazard Class: 9
  - o Identification Number: NA3082
  - o Label: Class 9
  - o Additional Information: (contains chromium)
  - o EPA Hazardous Waste Number: D007
7. Spent OBA Canisters. Spent OBA canisters must be disposed of as a hazardous waste due to their ignitable characteristic and barium content. Spent canisters will be disposed of and manifested as directed under Section H of Chapter 7.

B. Special Circumstances (independently moored vessels):

1. Definition. Independently Moored Vessel: For the purposes of this Instruction, an independently moored vessel is a vessel which has its own EPA identification number. There exist some cases where a CG facility serves as a homeport, and is a CESQG (generates no more than 100 kg of hazardous waste per month). In such cases, if the vessel causes the facility to generate over 100 kg per month it shall function as an independently moored vessel and the CESQG homeport shall function only as a transfer facility (40 CFR 263.12) unless a written host/tenant agreement states otherwise.

## **2. Management of Shipboard Generated Wastes.**

- a. Vessel Waste Exemption.** Coast Guard shipboard generated waste is not subject to the RCRA storage, manifest, inspection, or recordkeeping requirements until the waste is removed from the vessel. Once shipboard generated waste is removed from a vessel and transferred ashore it is subject to the same requirements as any other waste, even if the waste should be subsequently picked up by another public vessel. If the waste is transferred to another public vessel without being placed ashore, it becomes subject to RCRA regulation 90 days from the date the transfer took place.
- b. Host/Tenant Agreements.** At Coast Guard or DOD supporting shore facilities, a host/tenant agreement shall be executed whereby the host facility agrees to be responsible for the management and disposal of waste unloaded from a tenant vessel. Such an agreement clarifies the hazardous waste management duties of the host facility and tenant vessel and also avoids the need for the vessel to obtain an EPA identification number. See Figure 2-2 for a sample host/tenant agreement.
- c. EPA Generator ID Numbers.** Any independently moored vessel generating more than 100 kg (220 lbs) of hazardous waste in a calendar month and which also brings its hazardous waste ashore at any location other than a Coast Guard or DOD supporting shore facility must obtain a temporary generator identification number from EPA or the appropriate state. Independently moored vessels which use mooring sheds for temporary hazardous waste storage shall obtain an EPA ID number for the mooring shed and ensure that all vessel generated hazardous waste is managed in accordance with the applicable federal and state regulations. Mooring sheds are discouraged but not prohibited. It is recommended that independently moored vessels off-load hazardous waste directly to a pier-side waste disposal contractor to avoid the possibility of having their mooring shed regulated as a hazardous waste storage facility.

- 11.B.3. States Which Regulate Regardless of Quantity Generated. An independently moored vessel which produces hazardous waste in any quantity, and which is homeported in the states of California, Louisiana, Maine, Massachusetts (20kg), Minnesota, Ohio, or Rhode Island must obtain a temporary EPA ID number. This is necessary since the above states regulate all hazardous waste regardless of quantity.

C. Used Oils.

1. Federal Regulation. Used oil produced on vessels from normal shipboard operations is not subject to the used oil management standards of 40 CFR 279 until it is transported ashore. Once shipboard generated used oil is removed from a vessel and transferred ashore it loses its exemption from regulation, even if the used oil should be subsequently picked up by another public vessel. The vessel and the shore facility which accepts the used oil from the vessel are co-generators of the used oil and are both responsible for managing the oil in compliance with 40 CFR 279 once the oil is transported ashore. The host/tenant agreement must address who will be responsible for storage and off-site shipment of the used oil. See Section K of Chapter 7 which addresses the management of used oils in greater detail.
2. State Regulation. Some states such as California, South Carolina, and New Jersey presently regulate all used oil as a hazardous waste. Your CEU hazardous waste contact and/or appropriate state office should be consulted for any unique requirements.

D. Shipyard Disposal.

1. Contract Provisions. When a vessel is undergoing repair at a commercial shipyard, the repair contract shall specifically state that disposal of all hazardous wastes generated as a result of the contract will be performed by the contractor. Furthermore, the contractor shall meet all federal and state requirements including the possession of a state or EPA generator number.
2. Items Not Associated with Ship Repair. Bilge water, slop tanks, and other material which may be removed by contractor, but not associated with ship repair shall be tested to ascertain whether any of the materials qualify as a hazardous waste. Testing and disposal (if required) of this material should also be stipulated in the repair contract.

11.D.3. Generator Responsibility. For purposes of identifying generator responsibility at private shipyards, there are two general situations that may involve the generation of hazardous waste. The following provides guidance for each situation:

- a. When hazardous waste is generated as a result of work performed by the contractor, the contractor bears sole legal responsibility for proper management of wastes generated in the course of the contractor's activities. Specifically, any "material" which becomes a waste during the course of contractor activity will then be considered contractor generated hazardous waste. The contractor must use his generator number and assume all associated responsibilities. Not all contractors understand this responsibility. Accordingly, any contract shall specify generator responsibility under RCRA.
- b. In rare instances when hazardous waste is generated as a result of continuing operation of ship systems (operational HW), the contract shall stipulate that the contractor will perform generator responsibilities on behalf of the Coast Guard (the contract should also stipulate that copies of manifests for any wastes generated under this paragraph will be provided to the vessel for its records). Note however, that this contractual arrangement does not relieve the Coast Guard of any long term liability associated with generation of the waste. In addition, contractual responsibility for Coast Guard operational HW is only applicable to work performed in a private shipyard. Operational HW generated by vessels at the Coast Guard Yard or any Navy yard will be managed by the shore facility.



## ENVIRONMENTAL MANAGEMENT PROGRAM CONTACTS

Environmental Management Division  
COMMANDANT (G-SEC-3)  
U.S. Coast Guard Headquarters  
2100 Second Street S.W.  
Washington, DC 20593

COMDT (G-SEC-3)

Ed Wandelt, Chief (202) 267-2369

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Ken Orr (202) 267-2345  
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Commander, Facilities Design and  
Construction Center - FD&CC (Atlantic)  
5505 Robin Hood Road, Suite K  
Norfolk, VA 23510

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Seattle, WA

Michael Bowlus (206) 220-7370  
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Enclosure (1) to COMDTINST M16478.1B

**MLC-ATLANTIC**

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Enclosure (1) to COMDTINST M16478.1B

**MLC-PACIFIC**

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Louis Rivero (510) 535-7275  
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**Civil Engineering Unit (CEU) Honolulu  
Prince Kalanianoʻle Federal Building  
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**Civil Engineering Unit (CEU) Juneau  
P.O. Box 21747  
Juneau, AK 99802-1747**

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Mike Dombkowski (907) 463-2421



## U.S. EPA REGIONAL OFFICES

EPA REGION I  
Waste Mgmt. Division  
JFK Federal Building  
Boston, MA 02203  
(617) 565-3400

EPA REGION II  
Waste Mgmt. Division  
290 Broadway, 28th floor  
New York, N.Y. 10007  
(212) 637-3000

EPA REGION III  
Waste Mgmt. Division  
841 Chestnut St.  
Philadelphia, PA 19107  
(215) 597-8131

EPA REGION IV  
Waste Mgmt. Division  
100 Alabama St., S.W.  
Atlanta, GA 30303  
(404) 562-9590

EPA REGION V  
Waste Mgmt. Division  
77 West Jackson Blvd.  
Chicago, IL 60604  
(312) 886-7579

EPA REGION VI  
Waste Mgmt. Division  
1445 Ross Ave.  
Dallas, TX 75202  
(214) 655-6700

EPA REGION VII  
Waste Mgmt. Division  
726 Minnesota Ave.  
Kansas City, KS 66101  
(913) 551-7051

EPA REGION VIII  
Waste Mgmt. Division  
999 18th St.  
Denver, CO 80202  
(303) 293-7450

EPA REGION IX  
Waste Mgmt. Division  
75 Hawthorne St.  
San Francisco, CA  
(415) 744-1305

EPA REGION X  
Waste Mgmt. Division  
1200 Sixth Ave.  
Seattle, WA 98101  
(206) 553-1200



## WHERE TO GET MORE HELP

For further assistance in understanding the hazardous waste regulations applicable to you, contact your state hazardous waste agency. Other assistance resources include the EPA Resource Centers (including the RCRA Hotline) or your EPA Regional office.

### STATE HAZARDOUS WASTE MANAGEMENT AGENCIES

One of the best ways to ensure compliance with hazardous waste regulations is to set up a visit by an inspector from your state or local hazardous waste agency. These visits can help you identify and correct problems. During the visit, you can ask the inspectors questions and receive advice on effective ways to manage your hazardous waste. The best way to prepare for a visit from an inspector is to conduct your own self inspection.

#### Alabama

Land Division  
Alabama Department of  
Environmental Management  
1751 Cong. William L. Dickinson  
Drive  
Montgomery, AL 36130  
334 271-7730

#### Alaska

Division of Air and Water  
Hazardous Waste Section  
Alaska Department of Environmental  
Conservation  
410 Willoughby Avenue, Suite 105  
Juneau, AK 99801  
907 465-5158

#### American Samoa

American Samoa Environmental  
Protection Agency  
Government of American Samoa  
Pago Pago, American Samoa 96799  
Overseas Operator: 684 663-2304

#### Arizona

Hazardous Waste Compliance Unit  
Arizona Department of  
Environmental Quality  
3033 N. Central Avenue  
Phoenix, AZ 85012  
602 207-4108

#### Arkansas

Hazardous Waste Division  
Arkansas Department of Pollution  
Control and Ecology  
8001 National Drive  
Little Rock, AR 72219  
501 562-6533

#### California

Hazardous Waste Management  
Program  
Department of Toxic Substances  
Control  
P.O. Box 806  
Sacramento, CA 95812  
916 324-1781  
800 61-TOXIC (CA only)

#### Colorado

Hazardous Materials and Waste  
Management Division  
Colorado Department of Health  
4300 Cherry Creek Drive South  
Denver, CO 80222  
303 692-3320

#### Connecticut

Bureau of Waste Management  
Department of Environmental  
Protection  
79 Elm Street  
Hartford, CT 06106  
203 424-3023

**Delaware**

Hazardous Waste Management  
Branch  
Department of Natural Resources and  
Environmental Control  
P.O. Box 1401  
89 Kings Highway  
Dover, DE 19903  
302 739-3689

**District of Columbia**

Hazardous Waste Management  
Branch  
Pesticides and Hazardous Materials  
Division  
Environmental Regulatory  
Administration  
2100 Martin Luther King Avenue,  
S.E.  
Suite #203  
Washington, DC 20020  
202 645-6080

**Florida**

Bureau of Solid and Hazardous Waste  
MS4560  
Division of Waste Management  
Department of Environmental  
Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400  
904 488-0300

**Georgia**

Hazardous Waste Management  
Branch  
Environmental Protection Division  
Department of Natural Resources  
Floyd Towers East/Room 1154  
205 Butler Street, S.E.  
Atlanta, GA 30334  
404 656-7802

**Guam**

Solid and Hazardous Waste  
Management Program  
Guam Environmental Protection  
Agency  
130 Rajas Street, D107 Harmon  
Plaza  
Harmon, Guam 96911  
Overseas Operator: 671 646-8863

**Hawaii**

Solid and Hazardous Waste Branch  
Office of Solid Waste Management  
Department of Health  
919 Ala Moana, 2nd Floor  
Honolulu, HI 96814  
808 586-4226

**Idaho**

Hazardous Materials Bureau  
Division of Environmental Quality  
Department of Health and Welfare  
1410 North Hilton Street  
Boise, ID 83706  
208 334-5898

**Illinois**

Division of Land Pollution Control  
Illinois Environmental Protection  
Agency  
2200 Churchill Road  
Springfield, IL 62794-9276  
217 785-8604

**Indiana**

Hazardous Waste Management  
Branch  
Office of Solid and Hazardous Waste  
Indiana Department of  
Environmental Management  
105 N. Senate Avenue  
P.O. Box 6015  
Indianapolis, IN 46206-6015  
317 232-4417

**Iowa**

Environmental Protection Division  
Department of Natural Resources  
900 East Grand Avenue  
Des Moines, IA 50319-0034  
515 281-4968

**Kansas**

Bureau of Waste Management  
Department of Health and  
Environment  
Forbes Field, Building 740  
Topeka, KS 66620-0001  
913 296-1608

**Kentucky**

Hazardous Waste Branch  
Division of Waste Management  
Department of Environmental  
Protection  
18 Reilly Road, Frankfort Office Park  
Frankfort, KY 40601  
502 564-6716

**Louisiana**

Office of Solid and Hazardous Waste  
Hazardous Waste Division  
Louisiana Department of  
Environmental Quality  
P.O. Box 82178  
7290 Bluebonnet Drive  
Baton Rouge, LA 70884-2178  
504 765-0249

**Maine**

Division of Oil and Hazardous  
Materials Facilities  
Bureau of Hazardous Materials  
Control and Solid Waste Control  
Department of Environmental  
Protection  
State House, Station #17  
Augusta, ME 04333  
207 287-2651

**Maryland**

Hazardous Waste Program  
Hazardous and Solid Waste  
Management Administration  
Maryland Department of the  
Environment  
2500 Broening Highway  
Baltimore, MD 21224  
301 631-3345

**Massachusetts**

Division of Hazardous Waste  
Massachusetts Department of  
Environmental Protection  
One Winter Street, 7th Floor  
Boston, MA 02108  
617 292-5574

**Michigan**

Hazardous Waste Permit Section  
Waste Management Division  
Department of Natural Resources  
608 West Allegan, 1st Floor  
Lansing, MI 48933  
517 373-0530

**Minnesota**

Hazardous Waste Division  
Minnesota Pollution Control Agency  
520 North Lafayette Road  
St. Paul, MN 55155  
612 297-8512

**Mississippi**

Division of Hazardous Waste  
Management  
Office of Pollution Control  
Department of Environmental  
Quality  
2380 Highway 80 West  
P.O. Box 10385  
Jackson, MS 39204  
601 961-5052

**Missouri**

Hazardous Waste Management  
Program  
Division of Environmental Quality  
Department of Natural Resources  
Jefferson Building  
205 Jefferson Street  
P.O. Box 176  
Jefferson City, MO 65102  
314 751-3176

**Montana**

Solid and Hazardous Waste Bureau  
Department of Health and  
Environmental Sciences  
Cogswell Building  
P.O. Box 200901  
Helena, MT 59620-0901  
406 444-1430

**Nebraska**

Air and Waste Management Division  
Department of Environmental  
Quality  
1200 N Street, The Atrium  
Suite 400  
P.O. Box 98922  
Lincoln, NE 68509-8922  
402 471-4217

**Nevada**

Waste Management Bureau  
Division of Environmental Protection  
Department of Conservation and  
Natural Resources  
333 West Nye Lane  
Carson City, NV 89710  
702 784-1717  
800 882-3233 (NV only)

**New Hampshire**

Waste Management Compliance  
Bureau  
Waste Management Division  
Department of Environmental  
Services  
6 Hazen Drive  
Concord, NH 03301-6509  
603 271-2942

**New Jersey**

Bureau of Advisement and Manifest  
Department of Environmental  
Protection  
401 East State St./CN-421  
Trenton, NJ 08625  
609 292-8341

**New Mexico**

Hazardous and Radioactive Waste  
Bureau  
Environmental Department  
P.O. Box 26110  
Santa Fe, NM 87502  
505 827-4308

**New York**

Division of Hazardous Substances  
Regulation  
Department of Environmental  
Conservation  
50 Wolfe Road  
Albany, NY 12233  
518 485-8988

**North Carolina**

Hazardous Waste Section  
Division of Solid Waste Management  
Department of Environment, Health,  
and Natural Resources  
P.O. Box 27687  
Raleigh, NC 27611-7687  
919 733-2178

**North Dakota**

Division of Hazardous Waste  
Management  
Department of Health Management  
and Special Studies  
P.O. Box 5620  
Bismarck, ND 58502-5520  
701 328-5166

**Ohio**

Division of Hazardous Waste  
Management  
Ohio Environmental Protection  
Agency  
1800 Watermark Drive  
Columbus, OH 43215  
614 644-2944

**Oklahoma**

Division of Hazardous Waste  
Management  
Department of Environmental  
Quality  
1000 Northeast 10th Street  
Oklahoma City, OK 73117-1212  
405 271-5338

**Oregon**

Hazardous Waste Program  
Waste Management and Cleanup  
Division  
Department of Environmental  
Quality  
811 Southwest 6th Avenue  
Salem, OR 97204  
503 229-5913

**Pennsylvania**

Bureau of Waste Management  
Pennsylvania Department of  
Environmental Resources  
400 Market Street  
P.O. Box 8472  
Harrisburg, PA 17105-8472  
717 787-6239

**Puerto Rico**

Environmental Quality Board  
Office of the Governor  
Banco Nationale Plaza Building  
Suite 431  
Hato Rey, PR 00910  
809 767-8056

**Rhode Island**

Division of Waste Management  
Department of Environmental  
Management  
291 Promenade Street  
Providence, RI 02908  
401 277-2797

**South Carolina**

Division of Hazardous and Infectious  
Waste Management  
Department of Health and  
Environmental Control  
2600 Bull Street  
Columbia, SC 29201  
803 896-4000

**South Dakota**

Division of Environmental  
Regulation  
Department of Environment and  
Natural Resources  
523 E. Capitol Avenue, Foss Building  
Pierre, SD 57501-3181  
605-733-3153

**Tennessee**

Division of Solid Waste Management  
Tennessee Department of  
Environmental Conservation  
401 Church Street  
L&C Tower, 5th Floor  
Nashville, TN 37243  
615 532-0780

**Texas**

Industrial and Hazardous Waste  
Division  
Texas Natural Resources Conservation  
Commission  
P.O. Box 13087  
Austin, TX 78711-3087  
512 239-6592

**Utah**

Hazardous Waste Compliance Section  
Division of Solid and Hazardous  
Waste Management  
Department of Environmental  
Quality  
P.O. Box 144880  
Salt Lake City, UT 84114-4880  
801 538-6170

**Vermont**

Hazardous Waste Management  
Division  
Department of Environmental  
Conservation  
Agency of Natural Resources  
103 South Main Street, West Building  
Waterbury, VT 05671  
802 241-3888

**Virgin Islands**

Division of Environmental Protection  
Department of Planning and Natural  
Resources  
Government of the Virgin Islands  
1118 Watertown Homes,  
Christiansted Project  
St. Croix, VI 00820  
809 773-0565

**Virginia**

Office of Waste Resource  
Management  
Waste Division  
Department of Environmental  
Quality  
P.O. Box 10009  
Richmond, VA 23240-0009  
804 527-5145

**Washington**

Division of Hazardous Waste and  
Toxics Program  
Department of Ecology  
P.O. Box 47600  
Olympia, WA 98504-7600  
206 407-6758

**West Virginia**

Hazardous Waste Management  
Section  
Division of Environmental Protection  
Bureau of Environment  
State Complex Building 3, Room 732  
1356 Hansford Street  
Charleston, WV 25301  
304 558-5929

**Wisconsin**

Hazardous Waste Management  
Section  
Division of Environmental Quality  
Department of Natural Resources  
101 S. Webster Street  
Madison, WI 53702  
608 266-2111

**Wyoming**

Solid and Hazardous Waste Division  
State of Wyoming Department of  
Environmental Regulation  
122 West 25th Street  
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Cheyenne, WY 82002  
307 777-7752





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Official Business  
Penalty for Private Use \$300